

**Original and Selected.**

—The *Washington Chronicle* says "our people have faith in the manifest destiny of the nation. They look to the eventual absorption of the North American continent, and the Senate has undoubtedly gratified a national instinct by ratifying the treaty for the cession by Russia of her American possessions to the United States."

At one of the schools in Chicago the supervisor said to the children if they could give me text of the Scripture which forbade a man having two wives. One of the children suddenly replied in reply, the text: "No man can serve two masters."

—It is only thirty-seven years since the first steam railway line in the world was opened— that from Liverpool to Manchester, and the opening ceremony was performed by the

by the tragic death of Mr. Huskinson, a distinguished English statesman. Now the railroad traverses every civilized country, and the tread of the iron horse causes the earth to tremble in the jungles of India and in the land of the Pyramids, while it boldly assays to go over the Rocky mountains and under the Alps.

—The New Orleans newspaper publishers have agreed to discontinue their Monday morning editions, that all hands may have a day of rest on Sunday. A great many people who start back with unaffected horror at the thought of a *Sunday* morning paper, are not

aware that the work on such a paper is closed up Saturday night, while a *Monday* morning paper—the non-receipt of which they are as ready as others to complain—involves a large amount of labor on Sunday that cannot be avoided.

—The *Augusta (Ga.) Chronicle* comes out in favor of Gen. Grant for the next President, and calls him "the hope of the South." It also asks—"Could there be a greater peace-offering by the soldiers of the South to their victorious Northern brethren than Ulysses S. Grant?"

—Two French camels were looking at

—The Boston Transcript says it is easier to get a counterfeit out of the State Prison through the Executive Council, than a person out of the House of Correction, who has been sentenced there for violating the prohibitory

law.

—A short time since a surgeon was called as a witness for the purpose of proving damages upon an action of assault. He deposed that he had bled the plaintiff, and being asked if bleeding had been necessary, candidly answered: "We always find it necessary to do something when sent for."

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[From Harper's Weekly, April 6.]

**Impure Water.**

Strictly speaking, water is never found pure. There are always some things dissolved in it

or ultimately mingle with it. These may be the clouds, or the rain, or the dew, or the solvent of so many substances, or see at once that when it has been in contact with rocks of earth it cannot be free from accompaniments. But this is true even of that which falls from the clouds, for at least some of the particles where it takes down with it various substances which have risen from the earth and are diffused in the air. By this cleansing shower-bath that it gives the air it brings back to the earth some of the impurities which it has carried away. I know, have considerable agency in its fertilization. It even brings down some of the air itself, for there is always air in water, not merely that which we often see gathered in bubbles about some of the bubbles, but the air itself, as we may say, dissolved in it. That it is not the

The water, then, that we commonly use is really quite a compound mixture, and water as such is not the only substance that is capable of subjecting the water furnished by nature to certain processes. The air in it can be expelled by boiling, and it can be freed by the chemist from the particles of solid substances dissolved in it. But this purified, or rather the supposed to be, water is not fit for drinking, and it would not be rapid and tasteless, and it would not further, answer the purposes of life, either vegetable or animal. For example, if water were deprived of its air fishes could not survive, and if it were to contain no atoms of salts of lime, there would be no provision for the growth of their bones.

What we mean, then, by the ordinary ex-

proportion of those which, in ordinary circumstances, are harmless. Good water differs much in different localities in the amount of soluble matters contained in it. Water that runs over granite and gneiss, and is collected in granite basins, is apt to have but little of them. There are localities where the amount is as low as one twentieth of a grain in the gallon, but this is uncommon. Some waters in the granite region of the Adirondacks contain as much as 10 grains in the gallon. The general average in water commonly used for domestic purposes is from 20 to 30 grains.

The gradation as to purity in water is generally as follows: Rain-water in the open country where the air is not charged with impurities

Second, river water—of course that which is remote from the sources of impurity, that is, from the water lakes and the ocean—contains more spring water, the water of the deep well being less pure than that of the superficial spring. The water of the ocean or of a lake that has no outlet is largely charged with solid matter because evaporation does not carry the salt up with the water. In the ocean the solid matter amounts to from 2200 to 2800 grains in the gallon, and in some parts of the Dead Sea to 21,000 grains or more per cent.

Third, the water of the lakes is of the common sources of impurity in water as are the rivers. Filth of any kind accumulated upon the

There is, therefore, no danger from thoroughly purified, cultured, and aerated sewage, for the water in them must be vitiated by any continued deposit of filth near them where there is no cultivation. We see this very decidedly exemplified where wells are very near cesspools, and where the water is continually contaminated. The evil is less where the accumulation of filth are not so large—so much less as not to be recognized, and yet slowly but surely in injuring the health of those who use the water. We have those who have been made ill by drinking good wholesome water. The

ground necessarily becomes impregnated with impurities which can not be fully appropriated by the scanty vegetation, and the well finds thereby more impurities than it can use, and therefore from failure in quantity alone the cities need a supply from without, but a failure in quality also.

Sometimes wells in cities have been changed into external means of supply. In all such cases the lateral diffusion of the contents to the cesspools. The deposit of earth in the layers, the impurities that are found in the water, and the water of a well will find their way much more readily than those that are above its level. We believe that this is not an uncommon

The water in wells in the neighborhood of grave-yards is adulterated by animal products and is of decay when the remains are recent, and of mineral when the remains have been deposited for some time. The water of a well close to a church-yard in England, on being examined was found to contain 100 grains of saline matter in a gallon, almost one-half of which was nitrate of lime and of magnesia.

Water also comes from the ground in lakes or rivers, there are discharges of filth from factories and from the common sewers near or above the place of supply, the impurity of the water is undoubtedly a great source of disease.

Water is the most important of the elements of human life, and is wholly unfit for drink

ing purposes, even though it may be taken from a distance above London; for there is a large population all along its banks that must necessarily be supplied with water. A fact in regard to the eel-trade of London shows how much the city sewerage pollutes the water of the river. Eels are brought up for sale in small vessels contained in apartments through which water from without is admitted through holes so small they cannot escape through them. So destructive is the poisoning impurity of the water that these animals, when they are obliged to stop farther and farther from the city every year to deliver their living cargo.

In a report in relation to an epidemic of typhoid fever, the following facts are given:

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ulation was once made in regard to the water used in the city of Liverpool to this effect: "If the cause of its hardness could be removed, it would save 14 grains in the gallon to 2 grains, which would save fifty thousand pounds yearly, which represents a capital of one million and a quarter sterling at four per cent."

One of our readers has requested us to give our views on the curative powers of electricity. This would be going out of the range of these articles, as we confine ourselves in them strictly to the discussion of the preservation of health, and leave the question of treatment to be dealt of in the medical journals.











